Office of Science

Enclosure list for documents from the Office of Science

- 1. Letter to Catalytica Inc. from Dan Melamed, Molecular Processes, Division of Chemical Sciences, Office of Basic Energy Science, dated September 27, 1999. 1 page. Information withheld under Exemption B5 and B6. (F2002-00020)
- 2. Letter to Mr. Dan Melamed, Division of Chemical Sciences, Office of Basic Energy Sciences, from Catalytica Advanced Technologies, dated September 24, 1999. 1 page. Information withheld under Exemption B5 and B6. 1 page. (F2002-00020)
- 3. Letter to Catalytica Inc. from Dan Melamed, Division of Chemical Sciences, Office of Basic Energy Sciences, dated July 29, 1999. Information withheld under Exemption B5 and and B6. 1 page. (F2002-00020)
- 4. Letter to Catalytica, Inc. from Dan Melamed, Division of Chemical Sciences, Office of Basic Energy Sciences, dated July 27, 1999. 1 page. (F2002-00020)
- 5. Letter to Department of Chemical Engineering, Virginia Polytechnic Institute and State University, dated December 12, 2000. Information withheld under Exemption B5 and B6. 2 pages. (F2002-00020)
- 6. Letter to Catalytica, Inc. from Dan Melamed, Molecular Processes, Division of Chemical Sciences, Office of Basic Energy Sciences, dated September 10, 1999. Information withheld under Exemption B5 and B6. 1 page. (F2002-00020)

SEP 27 1999

HV

SC-141

DM/dcm

) (b)(b) (b) (b)

Catalytica Inc.
430 Ferguson Drive
Mountain View, Ca 94043

Dear Dr. Loffler:

Thank you very much for your review of the proposal by Professor Kamil Klier from Lehigh University entitled "Mechanisms and Controlling Characteristics of Catalytic Oxygenate Synthesis". Your comments will be very helpful in our evaluation.

Sincerely,

Dan Melamed Molecular Processes Division of Chemical Sciences Office of Basic Energy Sciences

Page 1 of 1.

September 24, 1999

Dan Melamed
Division of Chemical Sciences
Office of Basic Enregy Sciences

Dear Mr. Melamed:

I have reviewed the proposal titled "Mechanisms and controlling Characteristics of Catalytic Oxygenate Synthesis" by Professor Kamil Klier of Lehigh University. The author proposes to develop new catalysts for the synthesis of oxygenated organic molecules that are used as building blocks for both fine and commodity chemicals, and in transportation fuels. This work is a continuation/extension of previous work done by Prof. Klier who is well-known for his scientific rigor. His lab at Lehighlis an established catalysis research center. The physical and human resources to carry out the proposed research are available there.

The ideas put forward are founded on a thorough understanding of the interactions between solid surfaces and organic molecules. The catalysts that are proposed to develop are based on easily available raw materials, and the structures that are to be developed seem to be stable enough that the catalysts seem to be able to meet the demands of industrial production.

This research is of interest to those involved in the production of oxygenated molecules form natural gas, oil, and coal. More importantly, the production of molecules that enhance cetane number will be more needed as the demands for cleaner diesel engines increase.

Sincerely yours,

Catalytica Advanced Technologies

Page 1 of 1.

SC-142

DM/IIv

(b)6)(b)(6)

Catalytica Inc. 430 Ferguson Drive Mountain View, Ca 94043

Dear Dr. Loffler:

The accompanying proposal has recently been submitted to the Department of Energy for consideration. It would be of great help to me in evaluating this proposal if you would review it for its scientific merit and technological relevance. Of primary importance is your view of the quality of the scientific research that is being proposed, the experimental/theoretical approach taken by the investigator(s), as well as the adequacy of available resources. These are the criteria we want you to consider when you judge the proposed scientific effort. In addition, there are several questions you might consider in forming that judgment: 1) Why is this research being done? What is learned from the result? 2) Who cares? Who might use or need the knowledge gained from the proposed research? and 3) Why might this work be important to science and the Department of Energy?

Please take into account that I may wish to transmit an anonymous verbatim copy of your comments and recommendations to the proposer should circumstances warrant. I would greatly appreciate it if you could return your review within four weeks. If this is not possible, please suggest an alternate reviewer of appropriate expertise.

The Department of Energy regulations require that the reviewers agree to:
(1) return the proposal to us with the reviewers' comments; (2) use the information contained in the proposal for evaluation purposes only; and (3) treat such information in confidence. Proceeding with the review implies that those who review the proposal agree to these terms.

Your participation in the review process is very important to maintaining a high quality basic research program in the Department of Energy and is very much appreciated.

Sincerely,

Dan Melamed Division of Chemical Sciences Office of Basic Energy Sciences

Enclosure:

Proposal entitled "Mechanisms and Controlling Characteristics of Catalytic Oxygenate Synthesis" by Professor Kamil Klier of the Lehigh University

page 1 of 1 (3)

11 :7 1999

SC-142

DAM'S DAM'S DAM

Catalytica, Inc.
430 Ferguson Drive
Mountain View, CA 94043

Dear Dr. McCarty:

As you may know, we periodically review the programs of our research contractors when they apply for renewal. We have recently received the enclosed progress report and renewal request. I would like to have them examined critically to determine whether this program merits continued support both from the point-of-view of its intrinsic value and technical excellence and from considerations of the relevance of the work to the Department of Energy interests. It would be of great service to me if you would review this proposal. In preparing your review please take into consideration that I should like to be able to transmit your review in its entirety (merely omitting your name) to the proposer when circumstances warrant. I would greatly appreciate it if you could return your review within four weeks. If this is not possible, please suggest an alternate reviewer of expertise similar to your own.

The Department of Energy's regulations require that the reviewers agree to: (1) return the proposal to us with the reviewers' comments; (2) use the information contained in the proposal for evaluation purposes only; and (3) treat such information in confidence. We shall assume that your proceeding with the review constitutes your agreement to comply with these requirements.

Your participation in the review process is very important to maintaining a high quality basic research program in the Department of Energy and is very much appreciated.

Sincerely,

Dan Helamed Division of Chemical Sciences Office of Basic Energy Sciences

Enclosures:

- 1. Proposal entitled "Novel Catalysts for Advanced Hydroprocessing: Transition Metal Phosphides" by Professor S. Ted Oyama of the Virginia Polytechnic Institute & State Univ.
- 2. Progress Report

page 1 of 1

4

DEC 1 2 2000

DM/dcm 12/100

Department of Chemical Engineering Virginia Polytechnic Institute and State University Blacksburg, VA 24061

Dear Professor Cox:

As you may know, we periodically review the programs of our research contractors when they apply for renewal. We have recently received the enclosed progress report and renewal request. I would like to have them examined critically to determine whether this program merits continued support both from the point-of-view of its intrinsic value and technical excellence and from considerations of the relevance of the work to the Department of Energy interests. It would be of great service to me if you would review this proposal. In preparing your review please take into consideration that I should like to be able to transmit your review in its entirety (merely omitting your name) to the proposer when circumstances warrant. I would greatly appreciate it if you could return your review within four weeks. If this is not possible, please suggest an alternate reviewer of expertise similar to your own.

The Department of Energy's regulations require that the reviewers agree to: (1) return the proposal to us with the reviewers' comments; (2) use the information contained in the proposal for evaluation purposes only, and (3) treat such information in confidence. We shall assume that your proceeding with the review constitutes your agreement to comply with these requirements.

Your participation in the review process is very important to maintaining a high quality basic research program in the Department of Energy and is very much appreciated.

Sincerely,

Dan Melamed
Chemical Sciences, Geosciences
and Biosciences Division
Office of Basic Energy Sciences

Phone: 301.903.5998 Fax: 301.903.4110

E-Mail: dan.melamed@science.doe.gov

Enclosures:

- 1. Proposal entitled "Pd Catalysts for Use in Vehicular Applications" by Professor Lisa Pfefferle of Yale University
- 2. Progress Report

page of 2

3

Dar sent to:

Department of Chemical Engineering Virginia Polytechnic Institute and State University Blacksburg, VA 24061 V(v)(5) ((b)(6)

Department of Chemical Engineering University of Pennsylvania Philadelphia, PA 19104 (b)5)(b)6)

Department of Chemical Engineering University of South Carolina Columbia, SC 29208 $\sqrt{(b)(5)(b)(b)}$

Department of Chemical Engineering University of Wisconsin - Madison 1415 Engineering Drive Madison, WI 53706-1691 1. (b)(5,) (b)

Department of Chemistry Texas A&M University 3255 TAMU College Station, TX 77843-3255 (b) (b) (b) (b)

Department of Chemical Engineering 100 Institute Road Worcester Polytechnic Institute Worcester, MA 01609-2280

(b)(6)

Catalytica, Inc. 430 Ferguson Drive Mountain View, CA 94043

SC-142

SEP 1 B 1999

PM/dcm

Catalytica, Inc. (L)(5)(L)(6)

430 Ferguson Drive Mountain View, CA 94043

Dear Dr. McCarty:

The accompanying proposal has recently been submitted to the Department of Energy for consideration. It would be of great help to me in evaluating this proposal if you would review it for its scientific merit and technological relevance. Of primary importance is your view of the quality of the scientific research that is being proposed, the experimental/theoretical approach taken by the investigator(s), as well as the adequacy of available resources. These are the criteria we want you to consider when you judge the proposed scientific effort. In addition, there are several questions you might consider in forming that judgment: 1) Why is this research being done? What is learned from the result? 2) Who cares? Who might use or need the knowledge gained from the proposed research? and 3) Why might this work be important to science and the Department of Energy?

Please take into account that I may wish to transmit an anonymous verbatim copy of your comments and recommendations to the proposer should circumstances warrant. I would greatly appreciate it if you could return your review within four weeks. If this is not possible, please suggest an alternate reviewer of appropriate expertise.

The Department of Energy regulations require that the reviewers agree to:
(1) return the proposal to us with the reviewers' comments; (2) use the information contained in the proposal for evaluation purposes only; and (3) treat such information in confidence. Proceeding with the review implies that those who review the proposal agree to these terms.

Your participation in the review process is very important to maintaining a high quality basic research program in the Department of Energy and is very much appreciated.

Sincerely,

Dan Melamed Molecular Processes Division of Chemical Sciences Office of Basic Energy Sciences

Enclosure:

Proposal entitled "Active Sites and Effect of Sulfur on Molybdenum Carbides and Nitrides" by Professor Levi T. Thompson of the University of Michigan

